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EXAMINER

PAN, YUWEN

ART UNIT PAPER NUMBER

2682

DATE MAILED: 02/11/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/987,102

Applicant(s)

WHITE, ERIC D.

Examiner

Yuwen Pan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments filed 11/25/03 have been fully considered but they are not persuasive.

The applicant's argument is that "the Ayanoglu patent fails to teach a node (claim 1), adapted for use in a wireless communication system, that is capable of determining its own mobility", and "although these passages of the Ayanoglu patent use the term "mobility", Applicants respectfully submit that the 'mobility' which the Ayanoglu patent describes does not related to the 'mobility factor' that is determined for a node so that the rate of transmission by the node can be based on that mobility factor as in the claimed embodiments of the present invention."

The examiner respectfully disagrees. Granted, according to column 4 and 5 and column 8 and lines 36-57, the meaning of "mobility" is seemly limited to user mobility such as user walking speed or mobility management for just handling mobile sign-ons and idle handoffs. However, if the Applicants read thoroughly from column 8 and line 36 to column 9 and line 12, the Applicants should find out that Ayanoglu teaches more than just idle hand off, sign-ons or walking speed. Ayanoglu teaches that in order to support the connection control and mobility management procedures, there is a standard signaling VCI in which is sent between nodes. Each node maintained a routing table to determine the presence of nearby nodes or mobile communication device. One ordinary skill in the art knows that such routing table is commonly utilized in the data network system for each node to maintain a best performance in the network. For instance, there are two nodes, N2 and N3 in which connected N1 and N4 in two separated paths. Certainly, each node always checks the presence of near by node to see whether its

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neighbor is working normally. Let's say N1 use N2 as a default path to communicate with N4. Somehow, N1 is notified by N2 that N2 is experiencing delay and data traffic in which would decrease the quality link between N1 and N4. N1 would select an alternative path such as N3 in which could be a stationary node or mobile node that is working normally. Also, since the system is an ATM system in which is a data packet network system, more than one path would be selected depend on the routing tables of available nodes in the network to route packets from one point to the other. So, in stead of disconnect the default path, N1 would seek additional paths in order to maintain the quality on demand.

Therefore, the Examiner respectfully retains the ground rejection.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Ayanoglu et al (US005822309A).

With respect to claim 1, Ayanoglu discloses a node, adapted for use in a wireless communications network and being capable of determining its mobility, said wireless communications network comprising a plurality of other nodes, at least some of which being stationary, reads on portable base station nodes in which can be either wired or wireless such as

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radio or free-space optic (see figure 3, see column 2 and lines 18-30, see column 3 and lines 35-43, column 4 and lines 18-23), said node comprising:

a transceiver, adapted to communicate or attempt to communicate with at least one of said stationary other nodes in said network (see column 4 and lines 31-42); and

a controller, adapted to determine a mobility factor of said node based on said communication or attempted communication with said at least one stationary other node, and being adapted to control a rate at which said transceiver sends information pertaining to said node to at least one of said other nodes in said network based on said mobility factor, reads on the network management algorithms are designed to configure data tables change due to network upgrades and faults/restorals and each nodes in the system would change its data table according to existing of neighbor nodes in the range (see column 4 and lines 59-column 5 and lines 64, column 8 and lines 36-57, and column 9 and lines 13-42).

With respect to claim 9, Ayanoglu discloses a method of determining a mobility of a node, which is adapted for use in a wireless communications network, said wireless communications network comprising a plurality of other nodes, at least some of which being stationary, reads on portable base station nodes (see figure 3, see column 2 and lines 18-30), said method comprising:

controlling said node to communicate or attempt to communicate with at least one of said stationary other nodes in said network (see column 4 and lines 31-42);

determining a mobility factor of said node based on said communication or attempted communication with said at least one stationary other node (see column 4 and lines 59-column 5 and lines 64); and

controlling a rate at which said node sends information pertaining to itself to at least one of said other nodes in said network based on said mobility factor (see column 8 and lines 36-57).

With respect to claim 17, Ayanoglu discloses a computer-readable medium of instructions, adapted to determine a mobility of a node, which is adapted for use in a wireless communications network, said wireless communications network comprising a plurality of other nodes, at least some of which being stationary, reads on portable base station nodes (see figure 6, see column 2 and lines 18-30) said computer readable medium of instructions comprising:

a first set of instructions, adapted to control said node to communicate or attempt to communicate with at least one of said stationary other nodes in said network (see column 4 and lines 31-42);

a second set of instructions, adapted to determine a mobility factor of said node based on said communication or attempted communication with said at least one stationary other node (see column 4 and lines 59-column 5 and lines 64); and

a third set of instructions, adapted to control a rate at which said node sends information pertaining to itself to at least one of said other nodes in said network based on said mobility factor (see column 8 and lines 36-57).

With respect to claims 2,10, and 18, Ayanoglu further discloses said mobility factor represents a rate of mobility of said node (see column 4 and lines 59-column 5 and lines 64).

With respect to claim 3,11, and 19, Ayanoglu further discloses said rate at which said controller controls said transceiver to send said information is proportional to said rate of mobility (see column 8 and lines 36-57 and column 11 and lines 1-column 12 and line 10).

With respect to claims 4,12, and 20, Ayanoglu further discloses said communication by said transceiver with said at least one other stationary node enables said node to determine its distance to said at least one other stationary node (see column 13 and line 53-column 14 and line 3).

With respect to claims 5,13, and 21, Ayanoglu further discloses said attempted communication by said transceiver with said at least one other stationary node enables said node to determine whether said at least one other stationary node, is within a transmission range of said node (see column 13 and line 53-column 14 and line 3).

With respect to claims 6,14 and 22, Ayanoglu further discloses at least one of said stationary nodes includes a stationary router, adapted to route data packets which it receives that are addressed to other nodes to said other nodes (see column 6 and lines 11-40).

With respect to claim 7, 8, 15,16 and 23, 24, Ayanoglu further discloses at least one of said stationary nodes includes an access point, adapted to provide said node and a said other node with access to at least one of another portion of said network and another network different from said network includes an ad-hoc network (see figure 1-3, column 3 and line 45-column 4 and line 7).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Larsson et al (US006535498B1) disclose route updating in Ad-hoc networks.

Okanoue (US006134587A) discloses method of setting up ad Hoc local area network, method of communicating using said network, and terminal for use with said network.


5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 703-305-7372. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


Yuwen Pan
January 26, 2004


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
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